RIDGID

Drain Cleaner Manual

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Auto-Clean™ Drain Cleaning Machine

Model No. K-30

⚠ WARNING!

Read this Operator's Manual carefully before using this tool. Failure to understand and follow the contents of this manual may result in electrical shock, fire and/or serious personal injury.

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Drain Cleaner

Auto-Clean™ Drain Cleaning Machine

Model No. K-30

RIDGID

Auto-Clean™ Drain Cleaner	
Record Serial Number below and retain product serial number which is located on nameplate.	
Serial No.	

Safety Symbols

In this operator's manual and on the product, safety symbols and signal words are used to communicate important safety information. This section is provided to improve understanding of these signal words and symbols.

This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

⚠ DANGER DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

⚠ WARNING WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

⚠ CAUTION CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE NOTICE indicates information that relates to the protection of property.

This symbol means read the operator's manual carefully before using the equipment. The operator's manual contains important information on the safe and proper operation of the equipment.

This symbol means always wear safety glasses with side shields or goggles when handling or using this equipment to reduce the risk of eye injury.

This symbol indicates the risk of hands, fingers or other body parts being caught, wrapped or crushed in the drain cleaning cable.

This symbol indicates a risk of electrical shock.

General Power Tool Safety Warnings*

⚠ WARNING

Read all safety warnings and instructions. Failure to follow the warnings and instructions may result in electric shock, fire, and/or serious injury.

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE!

The term "power tool" in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

Work Area Safety

- **Keep work area clean and well lit.** Cluttered benches and dark areas invite accidents.
- **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust.** Power tools create sparks which may ignite the dust or fumes.
- **Keep children and by-standers away while operating a power tool.** Distractions can cause you to lose control.

Electrical Safety

- **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.** Unmodified plugs and matching outlets will reduce risk of electric shock.
- **Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electrical shock if your body is earthed or grounded.
- **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
- **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.** Damaged or entangled cords increase the risk of electric shock.
- **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** Use of a cord suitable for outdoor use reduces the risk of electric shock.
- **If operating a power tool in a damp location is unavoidable, use a ground fault circuit interrupter (GFCI) protected supply.** Use of a GFCI reduces the risk of electric shock.

* The text used in the General Safety Rule section of this manual is verbatim, as required, from the applicable UL/CSA 60745 4th edition standard. This section contains general safety practices for many different types of power tools. Not every precaution applies to every tool, and some do not apply to this tool.

Personal Safety

- **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a tool while you are tired or under the influence of drugs, alcohol or medication.** A moment of inattention while operating power tools may result in serious personal injury.
- **Use personal protective equipment. Always wear eye protection.** Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- **Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool.** Carrying power tools with your finger on the switch or energizing power tools that have the switch on invites accidents.
- **Remove any adjusting key or wrench before turning the tool ON.** A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- **Do not overreach. Keep proper footing and balance at all times.** Proper footing and balance enables better control of the tool in unexpected situations.
- **Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing, and gloves away from moving parts.** Loose clothes, jewelry, or long hair can be caught in moving parts.
- **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** Use of dust collection can reduce dust-related hazards.

Power Tool Use and Care

- **Do not force the power tool. Use the correct power tool for your application.** The correct power tool will do the job better and safer at the rate for which it was designed.
- **Do not use the power tool if the switch does not turn it ON and OFF.** Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- **Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools.** Such preventive safety measures reduce the risk of starting the power tool accidentally.
- **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.** Power tools are dangerous in the hands of untrained users.
- **Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use.** Many accidents are caused by poorly maintained power tools.
- **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- **Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed.** Use of the power tool for operations different from those intended could result in a hazardous situation.

Service

- **Have your power tool serviced by a qualified repair person using only identical replacement parts.** This will ensure that the safety of the power tool is maintained.

Specific Safety Information

⚠ WARNING

This section contains important safety information that is specific to this tool.

Read these precautions carefully before using the Auto-Clean™ Drain Cleaning Machine Model No. K-30 to reduce the risk of electrical shock or other serious personal injury.

SAVE THESE INSTRUCTIONS!

Keep this manual with the machine for use by the operator.

Drain Cleaner Safety

- **Before using, test the Ground Fault Circuit Interrupter (GFCI) provided with the power cord to insure it is operating correctly.** GFCI reduces the risk of electrical shock.
- Extension cords are not recommended unless they

are plugged into a **Ground Fault Circuit Interrupter (GFCI) found in circuit boxes or outlet receptacles.** The GFCI on the machine power cord will not prevent electrical shock from the extension cords.

- **Keep all electric connections dry and off the ground. Do not touch plugs or tool with wet hands.** Reduces the risk of electrical shock.
- **Wear leather work gloves. Never grasp the rotating cable with anything else, including cloth gloves or a rag.** They can become wrapped around the cable, causing hand injuries. Only wear latex or rubber gloves *under* leather work gloves. Do not use damaged gloves.
- **Do not allow the end of cable to stop turning while the machine is running.** This can overstress the cable and may cause twisting, kinking or breaking of the cable.
- **Position machine so that the AUTOFEED is within 6" (15 cm) of the drain inlet or properly support exposed cable when the distance exceeds 6" (15 cm).** Greater distances can cause control problems leading to twisting, kinking or breaking of the cable.
- **One person must control both the cable and the foot switch.** If the cutter stops rotating, the operator must be able to turn the machine motor off to prevent twisting, kinking and breaking of the cable.
- **Do not operate the machine in REV (reverse) rotation except as described in this manual.** Operating in reverse can result in cable damage and is used to back the tool out of blockages.
- **Do not wear loose clothing or jewelry. Keep your hair and clothing away from moving parts.** Loose clothing, jewelry or hair can be caught in moving parts.
- **Always use appropriate personal protective equipment while handling and using drain cleaning equipment.** Drains may contain chemicals, bacteria and other substances that may be toxic, infectious, cause burns or other issues. **Appropriate personal protective equipment always includes safety glasses and leather work gloves in good condition,** and may include equipment such as latex or rubber gloves, face shields, goggles, protective clothing, respirators and steel toed footwear.
- **Practice good hygiene.** Use hot, soapy water to wash hands and other body parts exposed to drain contents after handling or using drain cleaning equipment. Do not eat or smoke while operating or handling drain cleaning equipment. This will help prevent contamination with toxic or infectious material.
- **Do not operate this machine if operator or machine is standing in water.** Operating machine while in water increases the risk of electrical shock.
- **Only use drain cleaner to clean drains of recommended sizes according to these instructions.** Other uses or modifying the drain cleaning machine for other applications may increase the risk of injury.

Description and Specifications

Description

The RIDGID® Auto-Clean Drain Cleaning machine is designed to clean ¾" to 1½" drain lines in sinks, tubs and showers. The Auto-Clean drain cleaner is supplied with an air foot pedal for ON/OFF control of the motor and features a 2-way AUTOFEED® unit, which automatically advances and retrieves the cable. The AUTOFEED allows the cable to be directly fed into the drain which minimizes mess and helps to protect fixtures.

The Auto-Clean drain cleaner is not recommended for use with toilets.

Specifications

Motor Type .....Universal
Machine Rating.....⧈ Double Insulated
120VAC single phase
1.1 amp, 60Hz
NOM 120V~
1,1 A, 60Hz
Power Switch .....ON/OFF/Momentary Reverse
Operating Speed.....450 RPM
Drain Line Capacity.....¾" – 1½"
Weight .....11 lbs.
Cable.....¼" x 30' MAXCORE™ 50
Catalogue No. 34893

The Auto-Clean drain cleaner is protected under various U.S. and International patents and applications, including 6,412,136, 7,478,451, D509,929 and D570,558.

NOTICE This machine is made to clean drains. If properly used it will not damage a drain that is in good condition and properly designed, constructed and maintained. If the drain is in poor condition, or has not been properly designed, constructed and maintained, the drain cleaning process may not be effective or could cause damage to the drain. The best way to determine the condition of a drain before cleaning is through visual inspection with a camera. Improper use of this drain cleaner can damage the drain cleaner and the drain. This machine may not clear all blockages.

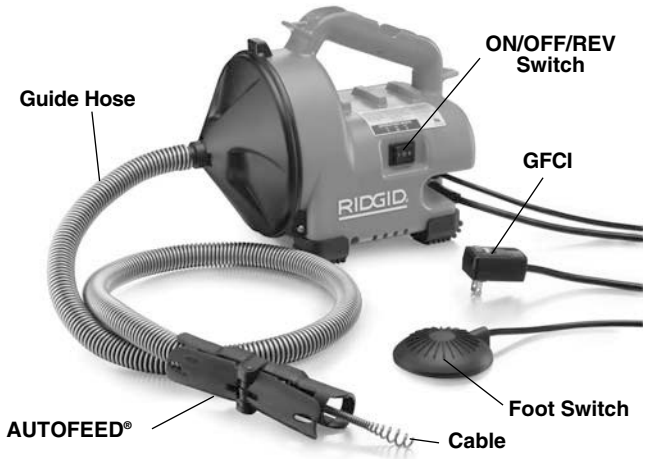


Figure 1 – Auto-Clean Drain Cleaner

Machine Assembly

⚠ WARNING

To reduce the risk of serious injury during use, follow these procedures for proper assembly.

Instructions For Attaching AUTOFEED Assembly

1. Put the tip of the cable into the guide hose *(Figure 2)* and feed it through the hose to the AUTOFEED® assembly.
2. The bulb head auger will not fit through the AUTOFEED® assembly. Pull up on both the ADVANCE and RETRIEVE levers and then feed the cable through the AUTOFEED®. *(Figure 3)*

Figure 2 – Feeding Cable into Guide Hose

Figure 3 – Feeding Cable Through AUTOFEED® Assembly

3. Release the ADVANCE and RETRIEVE levers.
4. Attach the guide hose to the machine by pushing the hose over the nose of the drum cover. *(Figure 4)*

Figure 4 – Attaching Guide Hose to Machine

Pre-Operation Inspection

⚠ WARNING

Before each use, inspect your drain cleaning machine and correct any problems to reduce the risk of serious injury from electric shock, twisted or broken cables, chemical burns, infections and other causes and prevent drain cleaner damage.

Always wear safety glasses, leather work gloves, and other appropriate protective equipment when inspecting your drain cleaner. For extra protection from chemicals and bacteria on the equipment, wear latex, rubber or other liquid barrier gloves under the leather work gloves.

1. Inspect the leather work gloves. Make sure they are in good condition with no holes, tears or loose sections that could be caught in the rotating cable. It is important not to wear improper or damaged gloves. The gloves protect hands from the rotating cable and drain contents. If the gloves are not leather work gloves or are damaged or worn out, do not use machine until proper gloves are available.
2. Make sure that the drain cleaning machine is unplugged and the ON/OFF/REV switch set to OFF. Inspect the power cord, Ground Fault Circuit Interrupter (GFCI) and plug for damage. If the plug has been modified, or if the cord is damaged, to avoid electrical

shock, do not use the machine until the cord has been replaced by a qualified repair person.

3. Clean any oil, grease or dirt from all equipment handles and controls. This aids inspection and helps prevent the machine or control from slipping from your grip. Clean any debris from the cable and drum.
4. Make sure the foot switch is attached to the drain cleaning machine. Do not operate the machine without the foot switch.
5. Inspect the drain cleaner for the following items:
   - Proper assembly and completeness
   - Broken, worn, missing, mis-aligned or binding parts
   - Smooth and free movement of the ADVANCE and RETRIEVE levers.
   - Presence and readability of the warning label *(see Figure 5).*

   If any problems are found, do not use the drain cleaner until the problems have been repaired.

Figure 5 – Warning Label

6. Inspect cable for wear and damage – Look for
   - Obvious flats worn into the outside of the cable (cable is made from round wire and profile should be round).
   - Multiple or excessively large kinks (slight kinks up to 15 degrees can be straightened).
   - Space between the coils indicating the cable has been deformed by stretching, kinking or running in REVERSE.
   - Excessive corrosion from storing wet or exposure to drain chemicals.

   All of these forms of wear and damage weaken the cable and make cable twisting, kinking or breaking more likely during use. Replace worn and damaged cable before using drain cleaner.

   Make sure cable is fully retracted with no more than 2" of cable outside of AUTOFEED. This will prevent whipping at start up.
7. Make sure that the FOR/OFF/REV switch is set to the OFF position.
8. With dry hands, plug cord into properly grounded outlet. Test the GFCI provided in the electrical cord to insure that it is operating correctly. When the test button is pushed in, the reset button should pop out. Reactivate by pushing the reset button in. If GFCI is not functioning properly, unplug the cord and do not use the drain cleaning machine until the GFCI has been repaired.
9. Move the ON/OFF/REV switch into the ON position. Do not push feed levers. Press the foot switch and note the direction of rotation of the cable. If the foot switch does not control the machine operation, do not use the machine until the foot switch has been repaired. The cable should rotate counter-clockwise when viewed from the front. Release the foot switch and let the cable come to a complete stop. Hold the ON/OFF/REV switch in the REV position, and repeat above testing to confirm that the drain cleaner operates properly in reverse. If the rotation is not correct, do not use the machine until it has been repaired.
10. With the inspection complete, move the ON/OFF/REV switch to the OFF position, and with dry hands, unplug the machine.

Machine and Work Area Set-Up

⚠ WARNING

Set up the drain cleaning machine and work area according to these procedures to reduce the risk of injury from electric shock, twisted or broken cables, chemical burns, infections and other causes, and prevent drain cleaner damage.

Always wear safety glasses, leather work gloves, and other appropriate protective equipment when setting up your drain cleaner. For extra protection from chemicals and bacteria on the machine and in the work area, wear latex, rubber or other liquid barrier gloves *under* the leather gloves.

Rubber soled, non-slip shoes can help prevent slipping and electric shock, especially on wet surfaces.

1. Check work area for:
   - Adequate lighting.

- Flammable liquids, vapors or dust that may ignite. If present, do not work in area until sources have been identified and corrected. The drain cleaner is not explosion proof and can cause sparks.
- Clear, level, stable dry place for machine and operator. Do not use the machine while standing in water. If needed, remove the water from the work area.
- Properly grounded electrical outlet. A three-prong or GFCI outlet may not be properly grounded. If in doubt, have outlet inspected by a licensed electrician.
- Clear path to electrical outlet that does not contain any potential sources of damage for the power cord.

2. Inspect the drain to be cleaned. If possible, determine the access point(s) to the drain, the size(s) and length(s) of the drain, distance to mainlines, the nature of the blockage, presence of drain cleaning chemicals or other chemicals, etc. If chemicals are present in the drain, it is important to understand the specific safety measures required to work around those chemicals. Contact the chemical manufacturer for required information.
3. Determine the correct drain cleaning equipment for the application. The Auto-Clean drain cleaner is made for:
   - Up to 1½" lines up to 25' long with ¼" cable.
   - The Auto-Clean drain cleaner is not recommended for use with toilets.
   - Drain cleaners for other applications can be found by consulting the RIDGID Catalog
4. Make sure machine has been properly inspected.
5. If needed, place protective covers in the work area.
6. If needed, take appropriate steps to access the drain to be cleaned.
   - For many drains, the cable can be threaded through the cross hairs in the drain *(See Figure 6).*
   - For a sink with a pop up drain plug: Remove lift rod and drain plug *(See Figure 7)*. Be sure to place a container under the clean out or trap to catch any water that may come out.
   - For other sinks a clean out plug or trap may need to be removed *(See Figure 8.)* Be sure to place a container under the clean out or trap to catch any water that may come out.
   - For bathtubs, never try to go through the drain, this will damage the cable. Remove the overflow plate and any mechanism to access the drain *(See Figure 9)*.

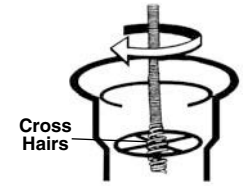


Figure 6

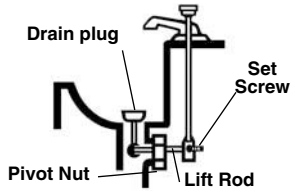


Figure 7

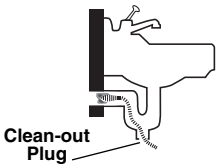


Figure 8

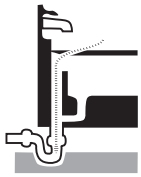


Figure 9

7. Position the drain cleaning machine so it sits squarely and firmly on the rubber feet provided. The end of the AUTOFEED must be within 6" (15 cm) of the drain opening. The guide hose should not be pulled tight or kinked to reach this position. Greater distances from the drain access increase the risk of the cable twisting or kinking.
8. If the machine cannot be placed close enough to the drain opening, extend the drain access back to within 6" from the AUTOFEED with similar sized pipe and fittings. Improper cable support can allow the cable to twist and kink and can damage the cable or injure the operator. *See Figure 10.*

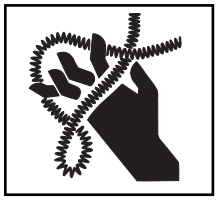
Figure 10 – Example of Extending Drain to Within 6" (15 cm) of AUTOFEED.

9. Evaluate the work area and determine if any barriers are needed to keep bystanders away from the drain cleaner and work area. Bystanders can distract the operator.
10. Position the foot switch for easy accessibility. You must be able to hold and control the AUTOFEED and guide hose, control the foot switch, and reach the ON/OFF/REV switch.
11. Confirm that the ON/OFF/REV switch is in the OFF position.
12. Run the cord along a clear path. With dry hands plug the drain cleaner into a properly grounded outlet. Keep all connections dry and off the ground. If the power cord is not long enough, use an extension cord that:
    - Is in good condition.
    - Has a plug similar to that supplied on the drain cleaner.
    - Is rated for outdoor use and contains a W or W-A in the cord designation (i.e. SOW).
    - Has sufficient wire size (16 AWG for 100' or less). Undersized wires can overheat, melting the insulation or causing a fire or other damage.

    When using an extension cord, the GFCI on the drain cleaner does not protect the extension cord. If the outlet is not GFCI protected, it is advisable to use a plug in type GFCI between the outlet and the extension cord to reduce the risk of shock if there is a fault in the extension cord.

Operating Instructions

⚠ WARNING



Always wear eye protection to protect your eyes against dirt and other foreign objects.

Always wear leather work gloves in good condition. Never grasp the rotating cable with anything else, including a rag. They can become wrapped around the cable, causing serious injury.

When cleaning drains that might contain hazardous chemicals or bacteria, wear appropriate protective equipment, such as goggles, face shields or respirators, to prevent burns and infections. For extra protection from chemicals and bacteria on the machine and in the work area, wear latex, rubber or other liquid barrier gloves *under* the leather work gloves. Rubber soled, non-slip shoes can help prevent slipping and electric shock, especially on wet surfaces.

Follow operating instructions to reduce the risk of injury from twisted or broken cables, cable ends whipping around, machine tipping, chemical burns, infections and other causes.

1. Make sure that machine and work area is properly set up and that the work area is free of bystanders and other distractions.
2. Wearing leather work gloves in good condition, pull cable out of machine and feed into drain. Push cable as far into drain as it will go. At least one foot of cable must be in drain so that the end of the cable will not come out of the drain and whip around when you start the machine.
3. Assume a proper operating position.
    - Be sure you can control the ON/OFF action of the foot switch and can quickly release the foot switch if needed. Do not step on foot switch yet.
    - Be sure that you have good balance, do not have to over reach, and cannot fall.
    - You must be able to control and support the guide hose and AUTOFEED as the cable feeds into the drain and blockage.
    - You must be able to reach the ON/OFF/REV switch.

    This operating position will help to maintain control of the cable and machine. *See Figure 11.*

Figure 11 – Using Machine With AUTOFEED

4. Move the ON/OFF/REV switch to the ON position. **Do not depress the foot switch yet.** Do not rotate the cable in reverse except as specifically described in these instructions. Running the drain cleaner in REV can damage the cable.

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Grasp the AUTOFEED with one hand and hold it so that the end of the AUTOFEED is within 6" (15 cm) of the drain opening. *See Figure 11.* The guide hose helps to protect the fixture from damage and contain the liquid thrown off the cable as it is retrieved from the drain. If the AUTOFEED is not kept within 6" (15 cm) of the drain opening, the cable will not be properly supported and may allow the cable to twist, kink or break.

Pay attention to how the guide hose feels in your hand. Because the guide hose is over the cable, there is less sensitivity to the loading of the cable, and it can be hard to tell if the cable end is rotating or not. If the cable end is not rotating, the drain is not being cleaned.

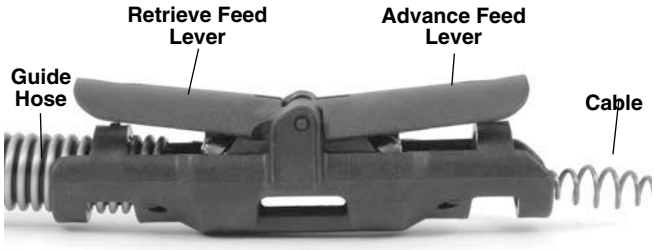


Figure 12 – Advance/Retract Feed Lever

Starting The Cable In The Drain

Confirm at least one foot of cable is in drain and end of AUTOFEED is less than 6" (15 cm) from Drain opening. Press on the foot switch to start the machine. To advance the cable into the drain, depress the ADVANCE feed lever *(Figure 12 and 13)*. The rotating cable will work its way into the drain. **The person controlling the cable and the AUTOFEED must also control the foot switch. Do not operate the drain cleaner with one person controlling the cable and AUTOFEED and another person controlling the foot switch. This can lead to kinking, twisting and breaking of the cable.**

If it is hard to get the cable through a trap, the following methods or combination of methods can be used.

- First, sharp downward thrusts on the cable/guide hose, both with and without the cable turning, can help to get the tool to pass through the trap.
- A second method is to run the drain cleaner in REV (REVERSE) for several seconds while pushing down on the cable/guide hose. Only do this long enough to get the cable started through the trap. Running the drain cleaner in reverse can damage the cable. With the cable rotating in REV, the ADVANCE feed lever retrieves the cable and the RETRIEVE feed lever advances the cable.
- Finally, if none of these options work, consider using a smaller diameter or more flexible cable, or a different drain cleaner.

Figure 13A – AUTOFEED in Advance Position

Figure 13B – AUTOFEED in Retrieve Position

Cleaning The Drain

Always keep one hand on the guide hose. As you feed the cable into the drain, you may feel and see the cable slow down and feel the guide hose start to load or wind up (this will feel like the guide hose is starting to twist or squirm). This may be a transition in the drain line (trap, elbow, etc.) build up in the drain (grease, etc.), or the actual blockage. Feed the cable slowly and carefully. Do not let cable build up outside drain. This can cause the cable to twist, kink or break. Keep end of AUTOFEED within 6" (15 cm) of drain opening.

Pay attention to the amount of cable that has been fed into the drain. Feeding cable into a larger drain line or similar transition may cause the cable to kink or knot and prevent removal from the drain. Minimize the amount of cable fed into the transition to prevent problems.

Working The Blockage

If the end of the cable stops turning, it is no longer cleaning the drain. If the cable end becomes lodged in the blockage and power is maintained to the drain cleaner, the cable will start to wind up (this may feel like the guide hose is starting to twist or squirm) or buildup outside the drain. Having a hand on the guide hose can allow you to feel this

wind up and control the cable. As you feel the cable wind up or if the cable end stops turning, immediately release the advance feed and depress the retrieve feed lever to free the cable end from the blockage. Don't keep the cable rotating if the cable end is stuck in a blockage. If the cable end stops turning and the drum keeps rotating, the cable can twist, kink or break.

Once the cable end is free of the blockage and the cable end is turning again, you can slowly feed the rotating cable end back into the blockage. Let the spinning cable end "dwell" in the blockage to help completely break it up. Do not try to force the cable end through the blockage. Work the cable end in this manner until it has moved completely past the blockage (or blockages), and the drain is flowing.

While working the blockage, the cable end may become clogged with debris and cuttings from the blockage. This can prevent further progress. The cable needs to be retrieved from the drain and the debris removed. *See section on "Retrieving the Cable".*

If the cable end continues to get hung up in the blockage, a different drain cleaner may need to be used.

Handling A Stuck Tool

If the cable end stops turning and the cable cannot be pulled back from the blockage, release the foot switch, maintain a firm grip on the AUTOFEED and guide hose and release the feed lever. **Do not remove your hand from guide hose or the cable may kink, twist and break.** The motor will stop and the cable and drum will turn backwards until the energy stored in the cable is relieved. Do not remove hand from the AUTOFEED and guide hose until the tension is released. Place ON/OFF/REV switch in the OFF position.

Freeing A Stuck Tool

If the tool is stuck in the blockage, hold the ON/OFF/REV switch in the REV position. With both AUTOFEED levers released press the foot switch for several seconds until it is free of the blockage. Do not operate the machine in the REV position any longer than required to free the cable end from the blockage or cable damage can occur. Place the ON/OFF/REV switch in the ON position and continue cleaning the drain.

Retrieving The Cable

Once the drain is open, if possible start a flow of water down the drain to flush the debris out of the line. This can be done by turning on a faucet in the system or other methods. Pay attention to the water level, as the drain could plug again.

With water flowing through the drain, retrieve the cable from the line by depressing the retrieve feed lever. The ON/OFF/REV switch should be in the ON position – do not retrieve the cable with the ON/OFF/REV in the REV position, this can damage the cable. As with feeding the cable into the drain, keep hands firmly on the AUTOFEED and guide hose for control. The cable end can become caught while being retrieved. The flow of water down the line will help to clean the cable as it is retrieved. Continue retrieving the cable until the tool is just inside the drain opening. Release the feed lever and release the foot switch, allowing the cable to come to a complete stop. **Do not pull the end of the cable from the drain while the cable is rotating. The tool can whip around and could cause serious injury.**

Place the ON/OFF/REV in the OFF position and with dry hands unplug the machine. Pull the remaining cable from the drain by hand and feed into the drain cleaner. If needed, continue cleaning following the above process. Several passes through a line are recommended for complete cleaning.

Maintenance Instructions

⚠ WARNING

ON/OFF/REV switch should be OFF and machine unplugged before performing any maintenance.

Always wear safety glasses and leather work gloves when performing any maintenance.

Cables

Cables should be thoroughly flushed with water after every use to prevent damaging effects of sediment and drain cleaning compounds. Flush cable with water and drain debris from drum by tipping machine forward after every use to remove sediment, etc. which can corrode cable.

AUTOFEED

After each use, hose out AUTOFEED assembly with water and lubricate with lightweight machine oil.

Cleaning

The machine should be cleaned as needed with hot, soapy water and/or disinfectants. Do not allow water to enter motor or other electrical components. Make sure unit is completely dry before plugging in and using.

Replacing the Cable

1. Remove the guide hose by pulling it off of the nose of the machine. Pull up on the AUTOFEED levers so that the end of the cable can fit through the AUTOFEED and pull the cable through the guide hose. Push remaining cable back into the drum until just the tip of the cable is left outside of the nose of the machine.

2. Loosen the three screws surrounding the outer drum housing. (The screws do not need to be completely removed). Remove the drum cover.
3. Pull the entire drum out of the machine.
4. Flip the drum over and remove the three outer-most screws from the drum. *(Figure 14)*
5. Pull out the inner drum and disconnect the cable. Push the end back into the drum.
6. Face the drum towards the floor. Starting with the auger end of the cable, pull the cable out completely through the front of the drum.

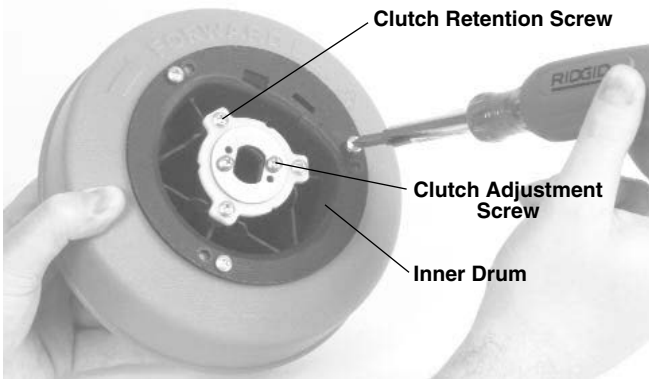


Figure 14 – Removing Screws From Drum

7. Feed the end of the new cable back through the nose of the outer drum and then attach it to the inner drum *(Figure 15)*. Use the illustration on the inner drum as a guide for which direction to start the cable.

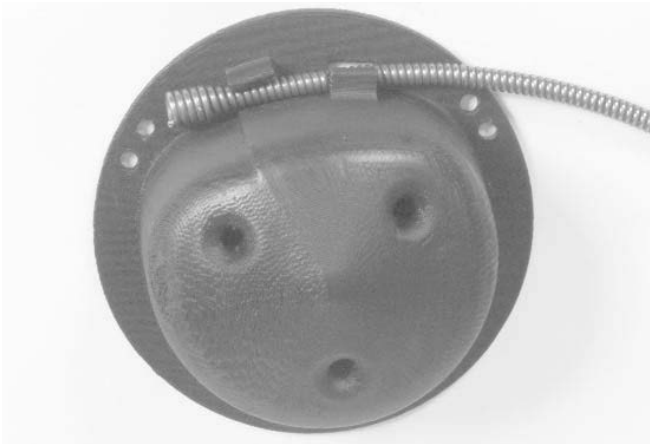


Figure 15 – Attaching Cable To Inner Drum

8. Replace inner drum back in outer drum. Put the section of the inner drum with the cable attached into the outer drum first. Push the rest of the inner drum into place. Line up the three screw holes and replace the screws.
9. Flip the drum over and manually feed the cable back into the drum. *(Figure 16)*

Figure 16 – Feeding Cable Into Drum

10. Place the machine on its end and place the drum back on the machine *(Figure 17)*. Spin the drum until it falls into place.

Figure 17 – Inserting Drum Into Machine

11. Replace the drum cover by lining up the holes over the screws. Then fasten screws.
12. Reattach the guide hose as shown in *Assembly Section*.

Clutch Adjustment

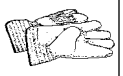
Machine is equipped with a slip clutch to limit machine movement during starting. The slip clutch may need adjusting after extended use. If the machine lacks power or does not reach full speed quickly the clutch will need adjustment.

1. Remove drum from machine. *(See "Replacing The Cable").*
2. Flip the drum over and remove the three clutch retention screws holding the clutch assembly in place.
3. Hold the nuts on the back of the clutch assembly while tightening the two clutch adjustment screws to 5 to 6 in.-lbs. Do not over tighten. *(See Figure 14).*
4. Replace the clutch retention screws holding the clutch to the drum.
5. Install the drum in the machine.

Accessories

⚠ WARNING

The following RIDGID products have been designed to function with the Auto-Clean Drain Cleaning Machine. Other accessories suitable for use with other tools may become hazardous when used on the Auto-Clean drain cleaner. To prevent serious injury, use only the accessories specifically designed and recommended for use with the Auto-Clean drain cleaner, such as those listed below.

	Catalog No.	Model No.	Description
	41937	—	RIDGID Drain Cleaning Gloves, Leather
	70032	—	RIDGID Drain Cleaning Gloves, PVC
	34893	—	1/4" x 30' MAXCORE™ 50 Cable

Machine Storage

⚠ WARNING The drain cleaner and cables must be kept indoors or well covered in rainy weather. Store the machine in a locked area that is out of reach of children and people unfamiliar with drain cleaners. This machine can cause serious injury in the hands of untrained users.

Service and Repair

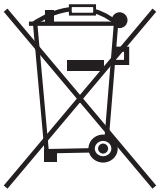
⚠ WARNING

Improper service or repair can make machine unsafe to operate.

The "Maintenance Instructions" will take care of most of the service needs of this machine.

Disposal

Parts of the Auto-Clean drain cleaner contain valuable materials and can be recycled. There are companies that specialize in recycling that may be found locally. Dispose of the components in compliance with all applicable regulations. Contact your local waste management authority for more information.



For EC Countries: Do not dispose of electrical equipment with household waste!

According to the European Guideline 2002/96/EC for Waste Electrical and Electronic Equipment and its implementation into national legislation, electrical equipment that is no longer usable must be collected separately and disposed of in an environmentally correct manner.

Chart 1 Troubleshooting

PROBLEM	POSSIBLE REASONS	SOLUTION
Cable kinking or breaking.	Cable is being forced.	Do Not Force Cable! Let the cutter do the work.
	Cable used in incorrect pipe diameter.	Use correct cable/equipment.
	Motor switched to reverse.	Use reverse only if cable gets caught in pipe.
	Cable exposed to acid.	Clean cables routinely.
	Cable worn out.	If cable is worn, replace it.
	Cable not properly supported.	Support cable properly, see instructions.
Cable stops rotating while foot switch is depressed. Restarts when foot switch is re-depressed.	Hole in foot switch or hose.	Replace damaged component.
	Hole in diaphragm switch.	If no problem found with pedal or hose, replace diaphragm switch.
Cable turns in one direction but not the other.	Faulty reverse switch.	Replace switch.
Ground Fault Circuit Interrupter (GFCI) trips when machine is plugged in or when foot pedal is depressed.	Damaged power cord.	Replace cord set.
	Short circuit in motor.	Take motor to authorized service center.
	Faulty GFCI.	Replace cord set that includes a GFCI.
	Moisture in motor, switch box or on plug.	Take drain cleaner to an Authorized Service Center.
AUTOFEED doesn't work.	AUTOFEED full of debris.	Clean AUTOFEED.
	AUTOFEED needs lubrication.	Lubricate AUTOFEED.
Machine wobbles or moves while cleaning drain.	Cable not evenly distributed.	Pull all cable out and refeed in, evenly distribute.
	Bumpers are not on ground.	Place on level, stable surface.
	Ground not level.	Place on level, stable surface.